

# **ACETALDEHYDE**

**UN 1089** 

Shipping Name: Acetaldehyde Other Names: Acetic aldehyde

> Ethanal Ethylaldehyde



- **WARNING!** EXTREMELY FLAMMABLE!
  - MAY EXPLODE WITHOUT WARNING WHEN EXPOSED TO HEAT, DUST OR CORROSIVE OR OXIDIZING AGENTS!

#### Hazards:

- Very irritating to skin and eyes, prolonged contact can cause burns
- Container may BLEVE when exposed to fire
- Fire fighting gear (including SCBA) does not provide adequate protection. If exposure occurs, remove and isolate gear immediately and thoroughly decontaminate personnel
- Vapors are heavier than air and will collect and stay in low areas
- Vapors in confined areas (e.g., tanks, sewers, buildings) may explode when exposed to fire
- Vapors may travel long distances to ignition sources and flashback

## **Awareness and Operational Level Training** Response:

- Stay upwind and uphill
- Determine the extent of the problem
- Isolate the area of release or fire and deny entry
- Remove all ignition sources
- For container exposed to fire evacuate the area in all directions because of the risk of BLEVE
- Evacuate the immediate area and downwind for a large release
- Notify local health and fire officials and pollution control agencies
- If material or contaminated runoff enters waterways, notify downstream users of potentially contaminated water

#### Description:

- Colorless liquid
- Pungent fruity odor
- Soluble in water
- Extremely flammable
- Vapors are heavier than air and will collect and stay in low areas
- Produces large amounts of vapor

### **Operational Level Training Response:**

#### RELEASE, NO FIRE:

- Stop the release if it can be done safely from a distance
- Prevent material and runoff from entering sewers and waterways if it can be done safely well ahead of the release
- Use large amounts of water to disperse vapors contain runoff
- Ventilate confined area if it can be done without placing personnel at risk
- Consider the application of alcohol resistant (AFFF) foam to spilled liquid to control vapors

#### FIRE:

- Specially trained personnel operating from a safe distance can fight fires using alcohol resistant (AFFF) foam or dry chemical if available in sufficient amounts. Under favorable conditions, experienced crews can use coordinated fog streams to sweep the flames off the surface of the burning liquid. Keep exposures cool to protect against re-ignition. Do not direct straight streams into the liquid.
- Cool exposed containers with large quantities of water from unattended equipment or remove intact containers if it can be done safely
- If cooling streams are ineffective (venting sound increases in volume and pitch, tank discolors or shows any signs of deforming), withdraw immediately to a secure location

#### First Aid:

- Provide Basic Life Support /CPR as needed
- Decontaminate the victim as follows:
  - ♦ Inhalation remove the victim to fresh air and give oxygen if available
  - Skin remove and isolate contaminated clothing (including shoes) and wash skin with soap and large volumes of water for 15 minutes
  - Eye rinse eyes with large volumes of water or saline for 15 minutes
  - Swallowed do not make the victim vomit
- Seek medical attention
- For skin burns rinse with water and apply a clean dry dressing

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